NOTES

1. For additional details of Terminal System (Type CAT), refer to the manufacturer's installation instructions.
2. Terminal System (Type CAT) to be used only in locations where there will be traffic on one side of the terminal system. For those locations where traffic would be on both sides of the CAT system, see Standard Plan A82A.
3. The Terminal System Backup is required for all Terminal System (Type CAT) installations. This allows the slotted rail elements to slide over the face of the unslotted rail elements.
4. For length and type of metal beam guard railing or metal barrier railing the terminal system is attached to, see Project Plans. For typical use of this terminal system with guard railing, see the A77E, A77F and A77G series of Standard Plans.
5. Both of the 3.43 mm thick slotted rail elements have an attachment plate welded to the back side of one end of each rail element. Attach the welded plate end of the rail elements to Post No. 4 prior to splicing the 2.67 mm thick slotted rail element over the 3.43 mm thick slotted rail element.
6. The 2.67 mm thick slotted rail elements have four 19 mm diameter holes near one end of the rail elements for the attachment of the spacer channel. Attach this end of the rail elements to Post No. 2.
7. For details of the anchor plate and 19 mm cable attached to Post No. 6, see Standard Plan A77H1.
8. Attach steel soil plate to steel foundation tube with 16 mm Ø x 190 mm hex head bolts with hex nuts (21 mm Ø holes in plate and in two sides of tube to accommodate hex bolts).
9. The 150 mm x 200 mm knockout tube is to be located 100 mm down from top of wood post. Attach the knockout tube to the post with two 10 mm Ø lag screws and flat washers.
10. Attach strut to Post Nos.1 and 2 foundation tubes with 16 mm Ø hex head bolts, washers, and hex nuts. Bolts extend through the strut, steel foundation tube, and wood posts.
11. Do not attach the rail elements to Post Nos.3, 5 and 6.
12. Yellow retroreflective sheeting, as provided by the Terminal System (Type CAT) manufacturer, shall be adhered to the rounded end of nose plate. The sheeting shall be consistent with the design pattern and colors of a Type P object marker panel. The sheeting shall be positioned on the end of nose plate so that it is visible to approaching traffic.
13. A 1830 mm length steel foundation tube, TS 203 x 152 x 4.8, without a soil plate, may be furnished and installed in place of the 1375 mm length steel foundation tube and soil plate shown. Minimum embedment of the 1830 mm length tube shall be 1760 mm. A 16 mm Ø hex head bolt and nut shall be installed in the hole in 1830 mm length tube to keep the wood post from dropping into the tube.

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Ellis K. Hirst
REGISTERED CIVIL ENGINEER

July 1, 2004
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Ellis K. Hirst — No. C17926 — Exp. 6-30-05 — CIVIL — STATE OF CALIFORNIA

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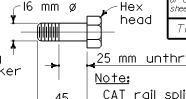
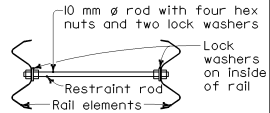
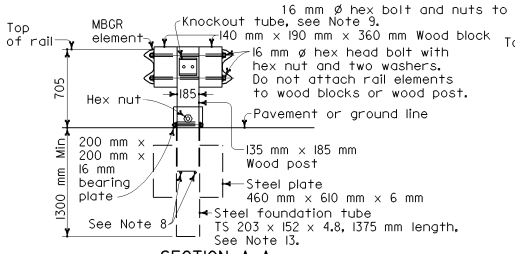


Note: CAT rail splice bolts allow telescoping action of rail sliding on rail.

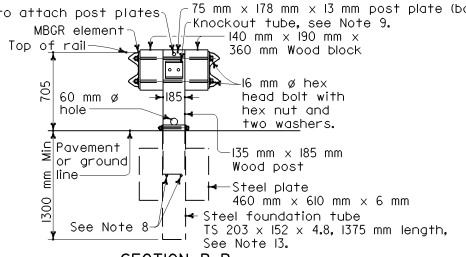


CAT RAIL SPLICE BOLT

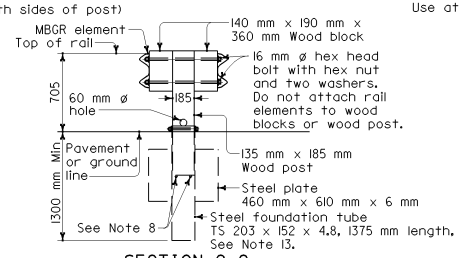
Use at Post Nos. 4 and 6



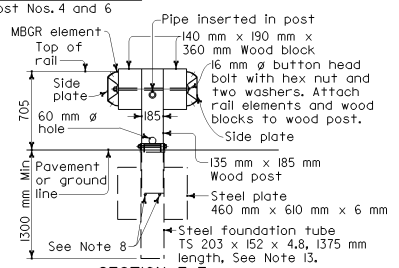
SECTION A-A



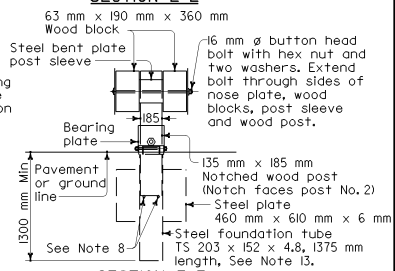
SECTION B-B
See Note 5



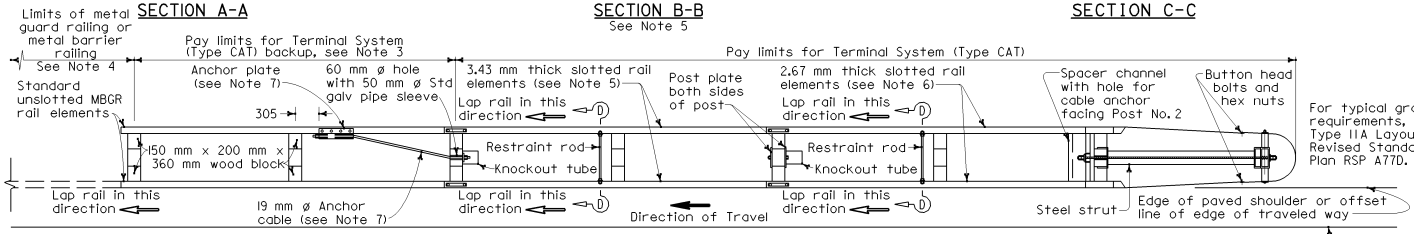
SECTION C-C



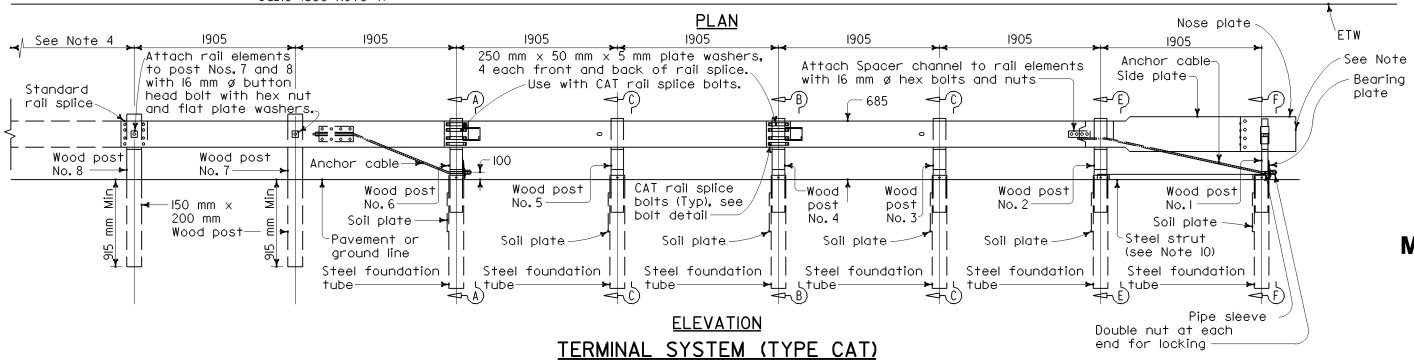
SECTION E-E



SECTION F-F



PLAN



ELEVATION

TERMINAL SYSTEM (TYPE CAT)

See Note 2

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM RAILING TERMINAL SYSTEM (TYPE CAT)

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

A77L4

2004 Std PLAN A77L4

05-07-04